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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
YAN, REN LUO	
ART UNIT	**PAPER NUMBER**
2854	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/554,034	AGNE ET AL.	
	Examiner	Art Unit	
	Ren L. Yan	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 November 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11,12,18,22,23,29,31 and 34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11,12,18,22,23,29,31 and 34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11, 12, 18, 22, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kot (7,131,379) in view of Ohno (5,813,333), DE 19723059 and Tokiwa (US 6,626,102).

With respect to Claim 11, Kot teaches in Figs. 1-2

a printing press, comprising:

a print unit 3-5;

a drive unit 10 and 11 assigned to the print unit;

a control unit 12 for regulating the drive unit; and

a print mark measuring device and/or register mark measuring device and/or a register measuring device 13 including a photoelectric detector configured to record or pick up a print mark of a paper track, wherein

the print mark measuring device and/or the register mark measuring device and/or the register measuring device 13 is directly connected to the control unit 12 to transmit a signal of the print mark to the control unit, which controls the movement of the drive unit 10, 11 to improve a print image of the print mark.

However, Kot does not teach that the detector is an camera, the print mark measuring device comprises an evaluation unit and wherein a correction factor is calculated by the control unit based on the print mark signal to regulate the movement of the drive unit.

Ohno teaches in an automatic register control system for multicolor rotary presses the conventional use of a CCD camera 100, 150 configured to record or pick up a print mark of a paper track and transmit the signal of the captured image data to the control unit to adjust the phase of the plate cylinders.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the printing press of Kot with a CCD camera as a simple substitution of a known print mark capturing device for another in order to achieve the predictable result of recording or picking up the image of the print mark.

As discussed in pages 1 and 2 of the present specification, DE 19723059 disclose in a printing press with color register control wherein the register marks printed on the track are picked up by sensors and evaluated in a measurement head of the sensors.

Tokiwa discloses (Fig. 3 and column 16 lines 5 – 24): a correction factor ($(Y_n+Y_4-Y_3)$ proportional in line 7) is (can be) calculated (line 6) by the control unit (3) to regulate the movement (line 15) of the drive unit (41).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify the printing press of Kot by including the evaluation unit in the measuring device as taught by DE 19723059 so as to predictably evaluate the register marks before sending the signals to the control unit thus speeding up printing registration control

process. It would also have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify the printing press of Kot, as modified by Ohno and DE 19723059 by including the calculation of a correction factor in the control unit as taught by Tokiwa for the purpose of increasing the accuracy and speed in controlling the drive unit.

With respect to Claim 12, the above modification/combination as applied to claim 11 meets all the limitations of Claim 12 (Figs 1 and 2 and column 4 lines 17 – 26 of Kot):

the printing press, wherein the print mark measuring device and/or the register mark measuring device and/or the register measuring device are connected by a means for signal transmission (arrow from 13 to 18) to the control unit (12).

With respect to Claim 18, Kot, as modified by Ohno and DE 19723059 teaches all that is claimed except for the print mark measuring device and/or the register mark measuring device and/or the register measuring device being connected to the control unit by a field bus system or a serial link.

However Tokiwa also discloses (column 1 lines 51 – 54): a field bus system (line 53) is used to connect the components in the printing press.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify the printing press of Kot, as modified by including the field bus system for connection in the printing press as also taught by Tokiwa for the purpose of increasing the accuracy and speed in the connection of the measuring device and the control unit.

With respect to Claims 22, the applied prior art also meets the limitations of Claims 22 (column 1 lines 51 – 54 of Tokiwa): a field bus system (line 53) or a serial link is provided as means for signal transmission (receive in line 52).

With respect to Claim 23, the applied prior art teaches the limitations of Claim 23 for the reason above except for the control unit has a master functionality with regard to further drive units or with regard to further control units.

However Tokiwa discloses in Fig. 3 and column 7 lines 30 - 39: the control unit has a master functionality (1) with regard to further drive units or with regard to further control units (via the network line 5).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify the printing press of Kot, as modified by including the master section as also taught by Tokiwa for the purpose of synchronously controlling the printing registration to improve printing quality.

With respect to claim 29, the above applied prior teaches the exact structure of a printing press as provided in the method steps as recited and the printing press as taught by the applied prior art would carry out the same method when it is operated under normal conditions.

Claims 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kot in view of Ohno and Tokiwa.

With respect to Claim 31, Kot disclosed in Figs 1 and 2 and column 4 lines 17 - 26: a printing press, comprising:

a print unit (3-5 and the image field including 8 and 9 in column 3 lines 57 - 58);

a drive unit (10 , 11) assigned to the print unit (3-5), wherein the drive unit comprises an inherent motor and a power converter for processing a control signal coming from a control unit 12,

the control unit (12) for regulating the drive unit (10, 11), wherein the control unit comprising an integrated evaluation unit (18); and

a print mark measuring device and/or register mark measuring device and/or a register measuring device (13 wherein 13 registers all the image field in column 4 lines 13 - 14), wherein the print mark measuring device and/or the register mark measuring device and/or the register measuring device (13) are directly connected to the control unit (12).

Kot does not teach that the detector 13 is an camera and may not teach that the drive unit(10-11) and the control unit (12) are integrated.

It has been held by the Court that simply making separate parts integral would only amount to a matter of obvious engineering choice that would have been obvious to those skilled in the art. In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) (A claim to a fluid transporting vehicle was rejected as obvious over a prior art reference which differed from the prior art in claiming a brake drum integral with a clamping means, whereas the brake disc and clamp of the prior art comprise several parts rigidly secured together as a single unit. The court affirmed the rejection holding, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice.") In the present application, since Kot teaches all of the required structural elements of the claimed invention, to merely make two of the structural elements integral without changing the functionality of these structural elements, separately or in whole, would have been obvious to those skilled in the art.

Ohno teaches an automatic register control system for multicolor rotary presses the conventional use of a CCD camera 100, 150 configured to record or pick up a print mark of a paper track and transmit the signal of the captured image data to the control unit to adjust the phase of the plate cylinders.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the printing press of Kot with a CCD camera as a simple substitution of a known print mark capturing device for another in order to achieve the predictable result of picking up the image of the print mark.

Kot, as modified, does not teach that a correction factor is calculated by the control unit to regulate the movement of the drive unit and does not teach that the print mark measuring device and/or the register mark measuring device and/or the register measuring device are connected to the control unit by a field bus system or a serial link.

However Tokiwa discloses (Fig. 3 and column 16 lines 5 – 24): a correction factor ($(Y_n+Y_4-Y_3)$ proportional in line 7) is calculated (line 6) by the control unit (3) to regulate the movement (line 15) of the drive unit (41).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Kot's printing press by including the calculation of a correction factor in the control unit as taught by Tokiwa so as to predictably result in increasing the accuracy and speed in controlling the drive unit.

Tokiwa also discloses (column 1 lines 51 – 54): a field bus system (line 53) is used to connect the various components in the printing press.

It would also have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify Kot's printing press by including the field bus system for connection in the printing press as also taught by Tokiwa for the purpose of increasing the accuracy and speed in the connection of the measuring device and the control unit.

With respect to claim 34, the applied combination teaches the limitations of Claim 34 for the reason above except the control unit has a master functionality with regard to further drive units or with regard to further control units.

However Tokiwa discloses in Fig. 3 and column 7 lines 30 - 39: the control unit has a master functionality (1) with regard to further drive units or with regard to further control units (via the network line 5).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Kot's printing press by including the master section as also taught by Tokiwa for the purpose of synchronously controlling the printing registration to improve printing quality.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ren L Yan/
Primary Examiner, Art Unit 2854
Jan. 6, 2011